L 27616-66

ACC NR: AP6018416

was determined by calculating the difference between the number of colonies on the first and second plates and determining the percentage of this difference in relation to the number of colonies on the first plate. Thus, for example, the bactericidal index of the skin of rabbits given a daily dose of 0.05 mg of metachlorophenylisocyanate per kg body weight for 6 months was 38.9% as compared with 68.7% for healthy controls. Statistical processing of the findings demonstrated that the bactericidal property of the skin decreases with increasing dosage of sevin or metachlorophenylisocyanate. The bactericidal index may be recommended as an indicator of the immunobiological state of animals in sanitary-toxicological studies. Orig. art. has: 1 figure and 1 table. [JPRS]

SUB CODE: 06 / SUBM DATE: 13Jan65 / ORIG REF: 006

Card 2/2

ACC NR: AR6017192 SOURCE CODE: UR/0092/65/000/012/A031/A032

AUTHOR: Ivanov, A. A.; Kulabukhov, Yu. S.; Timokhin, L. A.

TITLE: A converter of short time intervals with increased linearity

SOURCE: Ref. zh. Fizika, Abs. 12A309

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 2. M., Atomizdat, 1965, 15-19

TOPIC TAGS: analog digital converter, pulse code modulation, trigger circuit, tunnel diode

ABSTRACT: The authors describe a converter of short time intervals into a digital code, ensuring an increased linearity and at the same time sufficiently simple circuitry. The converter has no prior "stretching" of short time intervals. The time interval is measured directly by comparison with a number of cycles of oscillations of a known frequency. This method is widely used in microsecond devices, but owing to the lack of reliable high-speed trigger circuits, counting devices, etc., it could not be adopted for the nanosecond region. Such a possibility has been uncovered by the appearance of tunnel diodes with sufficiently high speed. The reference frequency is chosen to be 100 Mcs. To reduce a time channel up to 5 nsec by a factor of 2 compared with the period of the reference series, a special additional device is introduced into the converter circuit. The complete schematic diagram of the converter and different time diagrams illustrating its operation are presented. L. S. [Translation of abstract]

SUB CODE: 20, 09

Card 1/1

L 20718-66 EWT(d)/EWP(1) IJP(c) GG/BB

ACC NR: AP6007819 SOURCE CODE: UR/0120/66/000/001/0111/0114

AUTHOR: Ivanov, A. A.

ORG: none

29

B

16C

TITLE: Time-digital-code converter for nanosecond range

SOURCE: Pribory i tekhnika eksperimenta, no. 1, 1966, 111-114

TOPIC TAGS: nanosecond pulse, time digital code converter

ABSTRACT: As the existing analog time-pulse-height-time converters are inadequate for the purposes of modern experimental physics, a new non-analog converter has been developed. It uses the well-known principle of measuring a time interval by counting the number of pulses whose repetition rate is exactly known. A repetition rate of 200 Mc has been selected, which gives a time resolution of 5 nsec. The tunnel-diode counter capacity is 2^8, i. e., the maximum measurable time interval is 1.28 microsec. The differential nonlinearity of the converter is ± 0.4% or lower. The converter has been used under laboratory conditions for about 6 months. Reducing its resolution time to 1 nsec is held possible. A principal circuit of the converter is explained. Orig. art. has: 1 figure. [03]

SUB CODE: 09 / SUBM DATE: 24Dec64 / ORIG REF: 003 / OTH REF: 001/ ATD PRESS: 4223

Card 1/1 UDC: 621.374

L 20720-66 EWT(1)/EWT(m)/ETC(m)-6 DIAAP/IJP(c) WW

ACC NR: AP6007812 SOURCE CODE: UR/0120/66/000/001/0053/0061

AUTHOR: Anufriyenko, V. B.; Devkin, B. V.; Ivanov, A. A. Kotel'nikova, G. V.; Kulabukhov, Yu. S.; Lovchikova, G. N.; Sal'nikov, O. A.; Timokhin, L. A.; Fetisov, N. I.

ORG: Institute of Physics and Power Engineering, GKAE (Fiziko-energeticheskiy institut GKAE)

TITLE: Neutron transit-time spectrometer

SOURCE: Pribory i tekhnika eksperimenta, no. 1, 1966, 53-61

TOPIC TAGS: spectrometer, neutron spectrometer

ABSTRACT: A new fast-neutron transit-time spectrometer is described which can measure a neutron spectrum from 100 kev to 14 Mev. Monochromatic 14-Mev neutrons are produced by a $T^3(d, n)He^4$ reaction; deuteron energy, 250 kev; deuteron-pulse duration, 7 nsec; beam interruption before acceleration is used (sketch supplied). The neutron detector and electronic equipment are briefly described. The spectrometer resolution determined from a δ-peak is 4 nsec/m; channel width, 2.12 nsec; integral nonlinearity, 0.25%. From a time-to-pulse-height converter, the signals are fed to a 256-channel analyzer. The resolution time is 8 nsec; transit base, 2 m; linear dynamic range, 400 nsec. The photomultiplier is equipped with a noise-elimination device, and the detector is well protected from the background noise,

Card 1/2 UDC: 539.1.078:539.125.5

L 20720-66

ACC NR: AP6007812

8

both features ensuring a high effect-to-background ratio when 100-kev neutrons are measured. The spectrometer operation is illustrated by a spectrum of neutrons inelastically scattered by Mn."In conclusion, the authors wish to thank B. S. Novikovskiy and Ye. P. Ukraintseva for tending the accelerator operation, V. G. Zolotukhin for discussing the spectrometer efficiency, and N. S. Biryukov, M. D. Bityutskaya, V. A. Rumyantseva, A. M. Trufanov, and Ye. S. Chernichenko for their part in measurements and data processing." Orig. art. has: 9 figures and 3 formulas. [03]

SUB CODE: 18, 09 / SUBM DATE: 11Jan65 / ORIG REF: 004 / OTH REF 006/ ATD PRESS: 4223

Card 2/2

ANTONYUK, B.N.; DENESYUK, I.P.; KUROV, Yu.P.; VAYNSHTEYN, A.I.; BERDNIKOV, V.A.; VEYTSMAN, M.B.; IVANOV, A.A.; IVANOV, A.S.; GAYEVSKIY, B.G.; KOZEL'TSEV, L.K.; KOZEL'TSEV, L.I.; KUVALDIN, S.G.; MIROSHIN, A.I.; MIL'KOV, G.Ye.; ZUBKOVSKIY, B.P.; IZYUMOV, B.N.; EDEL'SHTEYN, V.I.; KOCHETKOV, V.P.; BUBLIKOV, A.V.; DZHANASHIYA, V.A.

Patents. Bum. i der. prom. no.1:53-54 Ja-Mr '65.

(MIRA 18:10)

IVANOV, A.A., kapitan 1-go ranga

High revolutionary vigilance, an important weapon in the fight against the intrigues of imperialists. Mor. sbor. 47 no.10:9-15 O '64. (MIRA 18:11)

IVANOV, A.A.; RYUTOV, D.D.

Emission of electromagnetic waves with a double plasma frequency from a plane plasma layer. Zhur. eksp. i teor. fiz. 48 no.2:684-690 F '65. (MIRA 18:11)

IVANOV, A.A.; OBODOVSKIY, B.A.; SMIRNOV, G.M.; BOCHAROV, V.A.; KOSTYUCHENKO, N.T.; LYUBOV, V.A.; MANOV, V.M.; MEDYNSKIY, A.F.; MISHCHENKO, V.P.; FURSA, I.G.

Investigating 350- and 480-ton welded steel-pouring ladles. Izv.vys.ucheb.zav.; chern. met. 8 no.4:220-223 '65. (MIRA 18:4)

1. Zhdanovskiy metallurgicheskiy institut.

Ivasov, Anatoliy Aleksandrovich

[illegible] Kiev.

printed. (At head of title: Odesskiy tekhnologicheskiy institut im. K. V. Lomonosova).

TOPIC TAGS: programmed education, teaching machine

[illegible] The [illegible] describes methods of teaching using linear and [illegible] programmed texts, describes the

institutions and persons desiring to become acquainted with the designs and technical characteristics of teaching machines.

TABLE OF CONTENTS:

Card

SOV/96-58-8-8/28

Card 2/2

06354
SOV/142-2-4-7/26

9 (2, 9)

AUTHORS: Nikitenko, V.I., Ivanov, A.A.

TITLE: A Variable Transformer Circuit for Phase Shifting Within the Limits of 2π

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1959, Vol 2, Nr 4, pp 431-436 (USSR)

ABSTRACT: The authors discuss a phase shifter circuit with a VTM variable transformer, which provides a continuous phase shift within the limits of 2π, linearly depending on the angle of rotation of the transformer rotor. The errors are determined, caused by inaccurate selection of the circuit parameters and by changes in the signal frequency. Recommendations are given for eliminating these errors. The dependences are derived for the relative change of the amplitude of the output signal, depending on the angle of rotation of the transformer rotor. The circuit arrangement with a VTM variable transformer is considerably simpler in tuning and produces less errors than the circuit arrangement where

Card 1/2

ACCESSION NR: AP5006516

AUTHOR: Ivanov, A. A.; Ryutov, D. D.

[illegible] waves with a double plasma frequency from a

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 48, no. 2, 1965, 684-690

TOPIC TAGS: plasma electromagnetic wave, double plasma frequency, plasma electromagnetic radiation

[illegible] waves with a double plasma frequency from [illegible] derived [illegible]

electromagnetic radiation.

L 43737-65
ACCESSION NR: AP5006518

waves are emitted from a thin plasma layer

lower number of plasma oscillations participate

in excitation of an electromagnetic wave for a given wave vector

express gratitude to L. I. Rudakov for valuable advice." Orig. art. has: 20

in excitation [illegible] express gratitude to L. I. Rudakov for valuable advice." Orig. art. has: 20 formulas.

ASSOCIATION: none

SUBMITTED: [illegible]

ENCL: 00

SUB CODE: EM, ME

IVANOV, A.A.; SILINA, A.A.; TSEL'NIKER, Yu.L.

On the transpiration of shelterbelts on the Derkul Steppe. Bot.zhur. 38 no.2:166-184 Mr-Ap '53. (MLRA 6:6)

1. Derkul'skaya opytnaya stantsiya Instituta lesa AN SSSR.
(Derkul Steppe--Trees) (Plants--Transpiration)

USSR/Miscellaneous - Transportation

Card : 1/1 Pub. 71 - 5/17

Authors : Pishunov, M. M., and Ivanov, A. A., Engineers

Title : Transportation of timber in mountainous conditions

Periodical : Mekh. trud. rab. 4, 14 - 16, June 1954

Abstract : A method of hauling lumber and forest products over mountainous terrain, by means of powered tow-cables, is described. Illustrations of a double-track cable tow-line and various car couplings, are included. Drawings.

Institution : ...

Submitted : ...

IVANOV, A. A.

Experimenting pulpewood transportation in bundles. Mor.flot 15 no.10:29-30 O'55. (MIRA 8:12)

1. Stividor Lesnogo mola Leningradskogo torgovogo porta
(Lumber--Transportation)

IVANOV, A.A.

Hemorrhagic fever with renal syndrome in districts of the Kama Valley of the Tatar S.S.R. Kaz. med. zhur. no.1:63-64 Ja-F'61 (MIRA 16:11)

1. Chistopol'skaya gorodskaya bol'nitsa (glavvrach - P.S. Krestnikov).

*

IVANOV, A.A., kand.med.nauk (Leningrad, 5-ya Krasnoarmeyskaya, d.3, kv.3)

Surgical treatment of anal atresia and closing of anus preternaturalis in children. Vest. khir. 80 no.2:122-124 F '58. (MIRA 11:3)

1. Iz kliniki khirurgii detskogo vozrasta (zav.-prof. A.V.Shatskiy [deceased]) Leningradskogo pediatricheskogo meditsinskogo instituta.
(ANUS, abnorm.
atresia & preternatural anus, surg. (Rus)

IVANOV, A.A.

Bed for aerosol therapy. Voen.-med.zhur. no.6:64-65 Je '59.
(MIRA 12:9)

(AEROSOLS
bed for admin. of aerosols (Rus))

IVANOV, A.A.

USSR/General Problems - Problems of Teaching A-3

Abst Journal : Referat Zhur - Fizika, No 12, 1956, 33610

Author : Ivanov, A. A.

Institution : None

Title : Demonstrating Experiments in Physics Lectures

Original Periodical : Sb.: Iz praktiki politekh. obucheniya, Moscow, Academy of Pedagogical Sciences RSFSR, 1955, 55-85

Abstract : The value of experiments designed to increase the interest of the students is established. Examples are cited to show the methodical measures with which the teacher gains the active participation of all students not only in the process of making observations but also in the interpretation of these observations. It is most important systematically to get the students to explain the phenomena observed and to guide the students toward independent judgment and conclusions on the basis of the analysis of observations.

Card 1/1

IVANOV, A.A.

Rubber industry in the first years of the Soviet regime. Kauch. i rez. 16 no.11:36-38 N '57. (MIRA 11:2)
(Rubber industry)

SOKOLOV, Nikolay Nikolayevich; ROZEN, Moisey Leyzerovich; IVANOV, A.A., nauchnyy red.; KAZAROV, Yu.S., red.; ERASTOVA, N.V., tekhn.red.

[Screw propellers made of stainless steel] Grebnye vinty iz nerzhaveiushchei stali. Leningrad, Gos.soiuznoe izd-vo sudostroit.promyshl., 1960. 124 p. (MIRA 13:10)
(Propellers) (Steel, Stainless)

130-58-5-11/16

AUTHORS: Maksimov, B.M., Zhetvin, N.P., Ivanov, A.A. and Babkov, G.V.

TITLE: Roller Guides on a 250 Wire Mill (Rolikovyye propuski na provolochnom stane 250)

PERIODICAL: Metallurg, 1958, Nr 5, pp 28 - 30 (USSR).

ABSTRACT: Roller instead of slip guides have been successfully used for the last five years when rolling 30-65 mm dia. rounds. The advantages of roller guides are outlined by the authors who discuss the difficulties which arose through high rolling speeds when such guides were used with 5-8 mm dia. wire. At the "Serp i Molot" Works, the 250 wire mill is used to roll low-carbon, medium carbon, tool (U7 - U13), austenitic and ferritic stainless (type 1Kh18N9T, "furrodit"), heat-resisting, high-speed and other steels into coiled 5.25-12.0 mm dia. wire. A fairly satisfactory slip guide was developed at the works jointly with the Moskovskiy institut stal' (Moscow Steel Institute) in 1954 but this still gave a defective product and a roller guide (Figures 1, 2) was constructed. This has one pair of rollers, is quickly and easily mounted and demounted and has some interchangeable bearings. For ease of passing the strip into the rollers and protecting the latter tubular cone guides are provided made,

Card1/2

Roller Guides on a 250 Wire Mill 130-58-5-11/16

like the rollers, of chromium-nickel-vanadium steel (1.8-2.2% C, 0.8-1.2% Mn, 0.5-1.0% Si, 23-25% Cr, 1.5-2.0% Ni, 1.0-1.3% W, 0.3-0.6% V, under 0.045% S and under 0.05% P. Two cone guides in series are provided, the feed-end one being held in position with a wedge which facilitates the clearing of cobbles. This type of guide the authors recommend both with manual and repeater operation. On the 450 and 300 mills at the works, guides with two pairs of rollers (Figure 4) are used but they have not proved satisfactory, whereas the one-pair types gave good results even when deliberately mis-aligned. The durability of a pair of rollers is up to 40-45 and 18-20 shifts on the Nr 2 and 3 lines, respectively, of the 250 mill. There are 4 figures.

ASSOCIATION: Zavod "Serp i Molot" ("Serp i Molot" Works)

Card 2/2

IVANOV, A.A., inzh.

Experimental investigation of Oldham's coupling with a low friction coefficient. Izv.vys.ucheb.zav.; chern.met. no.8:153-156 Ag '58. (MIRA 11:11)

1. Zhdanovskiy metallurgicheskiy institut.
(Couplings)

IVANOV, A.A., Cand Tech Sci -- (diss) "Study of the performance of compensating couplings with an intermediary movable disk." Dnepropetrovsk, 1953. 15 pp (Min of Higher Education UkSSR. Dnepropetrovsk Order of Labor Red Banner Metallurgical Inst in I.V. Stalin). 150 copies (KL,38-59, 116)

36

YEFIMOV, V.F., inzh.; IVANOV, A.A., inzh.; LEYTIN, G.S., inzh.; PAVLOVA, Ye.S., inzh.; TSALIT, O.N., inzh.; ZHOGOLEV, V.S., inzh.

[Road and building machinery and mechanized building tools; catalog-reference book] Stroitel'nye i dorozhnye mashiny i mekhanizirovannyi stroitel'nyi instrument; katalog-spravochnik. Moskva, TSentr.biuro tekhn.informatsii Vniistroidormasha, 1958. 471 p. (MIRA 13:3)

1. Russia (1917- R.S.F.S.R.) Gosudarstvennaya planovaya komissiya Rosglavtyazhmashenabsbyt. 2. TSentral'noye byuro tekhnicheskoy informatsii Vsesoyuznogo nauchno-issledovatel'skogo instituta stroitel'nogo i dorozhnogo mashinostroyeniya (TsBTI VNIIStroydormash)(for all).
(Building machinery) (Road machinery)

IVANOV, A.A.

Attachment for grinding and lapping dies. Stan.i instr. 32 no.3:39 Mr '61. (MIRA 14:3)

(Grinding machines)

ZAKHAROV, A.A., kand.tekhn.nauk; IVANOV, A.A., inzh.

Effect of ovality on the long-term strength of bent pipes. Energomashinostroenie 9 no.6:33-34 Je '63. (MIRA 16:9)

IVANOV, A.A., inzh.

Manufacturing a reinforced concrete bed for the 3A164 grinding machine. Mashinostroenie no.1:18-21 Ja-F '64. (MIRA 17:7)

IVANOV, A.A., doktor tekhn.nauk; MARYUTA, A.N.; YURTAYEV, A.V.

Unit for continuous coarseness control of ore feeded for milling.
Avtom. i prib. no. 1:18-20 Ja-Mr '64. (MIRA 17:5)

SMIRNOV, G.M.; IVANOV, A.A.; BOCHAROV, V.A.; KOSTYUCHENKO, N.T.; MEDYNSKIY, A.F.; MISHCHENKO, V.P.; TANCHIK, Ye.M.

Welded ladle for pouring steel. Met. i gornorud. prom. no. 2: 65 Mr-Ap '64. (MIRA 17:9)

BABOSHIN, V.A.; BOROVIKOV, P.P.; ZAKHARCHENKO, A.I.; IVANOV, A.A.; NIKANOROV, A.S.; NIKITIN, V.D.; RYTSK, Yu.Ye.; SMIRNOVA, V.S.; SOKOLOV, Ya.N.; SOLOV'YEV, A.T.; TSEKHOMSKIY, A.M.

In memory of Daniil Timofeevich Misharev. Trudy VSEGEI 108:189-191 '64. (MIRA 18:2)

IVANOV, A.A.

Evgraf Stepanovich Fedorov, a great scholar. Zap. Ural otd. Geog. ob-va SSSR no.2:3-12 '55. (MIRA 16:12)

1. Chlen-korrespondent AN SSSR.

15-57-1-751

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1, p 119 (USSR)

AUTHOR: Ivanov, A. A.

TITLE: Some New Data on the Salt Content Along the South-eastern Border of the Siberian Platform (Nekotoryye novyye dannyye o solenosnosti yugo- vostochnoy okrainy Sibirskoy platformy)

PERIODICAL: Materialy Vses. n.-i. in-ta, 1956, Nr 8, pp 268-281.

ABSTRACT: Twenty deep rotary drill holes between the Angara and Lena Rivers uncover Cambrian saliferous deposits. The basin contains thick sedimentary sequences of Quaternary, Mesozoic, and Paleozoic age resting on the crystalline basement. The Upper Cambrian deposits, the Upper Lena series, consist of red and variegated marls and layers of sandy marls and sandstones, with abundant gypsum, especially in the lower part. The sequence ranges in thickness from 10 m to 200 m and more.

Card 1/4

15-57-1-751

Some New Data on the Salt Content Along the Southeastern (Cont.)

Middle Cambrian rocks are generally absent. The Lower Cambrian, the Belaya and Angara series, consists of a carbonate sequence: dolomites, dolomitized limestones, marls, anhydrite-dolomites, occasional sandstones. Gypsum is characteristically abundant. The thickness of the sequence is 800 m to 1000 m and more. Below this sequence occur saliferous beds: alternations of rock salt, anhydrite-dolomite, dolomite, anhydrite, occasional sandstone. Two interbeds of diabase are found in the Zhigalovo (6 m thick) and the Ust'-Kut (68 m thick) regions. The thickness of the salt layers ranges from a fraction of a meter to tens of meters, locally to as much as 100 m to 140 m and more. The total thickness of this sequence ranges from 348 m to 1092 m. The proportion of salt in the beds ranges from 37 to 72 percent, averaging 60 to 65 percent. The thickness of the sequence ranges from 50 m or 60 m along the southeastern border of the platform to 1500 m or 1600 m to the northeast. Below this sequence occur the Moty and Ushakovka series (Cambrian), salt-bearing anhydrite-marl-dolomite rocks in the upper part, and variegated sandstones, siltstones, and mudstones in the lower part. The total thickness of this sequence is 738 m. The

Card 2/4

base of the salt-bearing sequence becomes lower to the northeast. Rock salt (81.1 to 98.5 percent NaCl and 0.7 to 9.6 percent gypsum) forms an entire series of varieties of different colors, textures, and structures. Gray salt is most abundant, but in the lower and upper horizons red is dominant. Admixtures in the halite include sylvite, clay material, anhydrite, authigenic quartz, carbonates of the dolomite-ankerite series, and occasional magnesite. At a depth of 1233 m in the core of the Tyret' drill hole, borate with radiating structure occurs in aggregates. The aggregates are white, the crystals colorless and transparent. The optical properties are $2V = +46^{\circ}$, $Ng = 1.670$, and $Np = 1.637$. The composition (in percent) is CaO 29.77, SrO 1.94, MgO 2.14, Na_2O 3.50, B_2O_3 13.36, SO_3 2.38, Cl 5.13, H_2O 6.85, CO_2 4.76, H. o. (sic) 0.54, R_2O_3 0.36; total 100.70. It is stated that NaCl, $CaCl_2$, $MgCO_3$, and $CaSO_4$ constitute 23.5 percent of the admixture. The mineral is similar to "kurgantaite."

V. D. K.

Editor's note: A misprint appears in the optical data of the

3(5) PHASE I BOOK EXPLOITATION SOV/1886

Ob"yedinennaya nauchnaya sessiya po metallogenicheskim i prognomym kartam, Alma-Ata, 1958.

Materialy nauchnoy sessii po metallogenicheskim i prognomym kartam; doklady. (Materials Presented at the Scientific Session on Metallogenetic and Postulated Ore Occurrence Maps; Reports) Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1958. 318 p. Errata slip inserted. 3,850 copies printed.

Ed.: A.S. Pogozhev; Tech. Ed.: P.F. Alferova.

Sponsoring Agencies: (1) Akademiya nauk SSSR, (2) Akademiya nauk Kazakhskoy SSR, Alma-Ata, (3) USSR. Ministerstvo geologii i okhrany nedr, (4) Kazakh SSR. Ministerstvo geologii i okhrany nedr.

PURPOSE: This book is intended for exploration geologists, mining engineers, and cartographers.

Materials Presented (Cont.) SOV/1886

COVERAGE: This collection of reports was presented at the United Scientific Session on Metallogeny and Postulated Ore Occurrence Maps convoked by the Academy of Sciences in Alma-Ata, December, 1958. The reports deal with various aspects of compiling metallogenetic and ore occurrence maps as well as the methodology and techniques of correlating geophysical exploration data. These reports deal only with non-ferrous metals. Three other reports delivered at the conference but not included in this work were read by Ye.Ye. Zakharov, N.S. Shatskiy, and Yu.K. Goretskiy. References accompany each article.

TABLE OF CONTENTS:

Materials Presented (Cont.) SOV/1886

Card 5/6

IVANOV, A.A.

Distribution and types of potassium salt deposits. Geol. rud. mestorozh. no.4:65-77 Jl-Ag '59. (MIRA 13:1)

1.Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut, Leningrad.

(Potassium salts)

IVANOV, Andrey Alekseyevich; LEVITSKIY, Yuriy Frolovich; SPIZHARSKIY, T.N., retsenzent; BRUNS, Ye.P., retsenzent; LIKHAREV, B.K., retsenzent; STEPANOV, D.L., retsenzent; LUPPOV, N.P., retsenzent; KORENEVSKIY, S.M., retsenzent; TATARINOV, P.M., red.; GOL'DBERG, R.Ya., red. izd-va; IVANOVA, A.G., tekhn.red.

[Geology of halogenic deposits (formations) in the U.S.S.R.] Geologiia galogennykh otlozhenii (formatsii) SSSR. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po geol.i okhrane nedr, 1960. 421 p. (Leningrad. Vsesoiuznyi geologicheskii institut. Trudy, vol.35) (MIRA 13:6)

(Salts)

IVANOV, A.A.; LEVITSKIY, Yu.F.; BAYAZITOV, S.Kh.; BANCHENKO, M.S.

Geology and factors in the formation of the Starobin potassium salt deposit in White Russia. Trudy VSEGEI no.68:3-75 '61. (MIRA 15:8)

(Starobin region--Potassium salts)

IVANOV, A.A.

History of the discovery of the Verkhnekamsk potassium salt deposit. Trudy VSEGEI 83:137-145 '62. (MIRA 16:9)

IVANOV, A.A.

Structure of the northern terminal of the Vyatka elevation in the light of geophysical data. Dokl. AN SSSR 146 no.1:171-174 S '62. (MIRA 15:9)

1. Predstavleno akademikom D.V. Nalivkinym.
(Vyatka Valley--Geology, Structural)

IVANOV, A.A.; SHESHUKOV, N.G.; SAPRYKIN, F.Ya.

Wood remains in salt deposits. Sov.geol. 6 no.8:107-111 Ag '63. (MIRA 16:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut.
(Trees, Fossil) (Salt deposits)

IVANOV, A.A.

Variegated sylvinites of the Verkhnekamsk potassium salt deposit.
Trudy VSEGEI 99:153-180 '63. (MIRA 17:6)

Some [illegible] of the hydrogeochemistry of the Verkhnekamskoye potassium salt deposit. Trudy VNIGRI [illegible]: 239-244 [illegible]. (MIRA 17:9)

Apparatus for treating substances with gases. N. V. Vinogradov and A. A. Ivanov. Russ. 15,714, June 30, 1930. A tube contg. pistons connected by chains into a continuous band is equipped with exits and inlets for gas, vapor, condensate, etc., and is of such length that it can be divided into a number of sections by the pistons. Gas pressures higher or lower than atm. can be used.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

10

Prevention of adhesion of bivinyl to the walls of the reaction vessel. A. A. Ivanov. Russ. 38,778, Sept. 30, 1934. The adhesion is lowered by covering the walls of the autoclaves with a paste contg. ingredients that decompose at about 100° with the formation of gases

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

Ca

10

The action of nitrogen trioxide on allene and on dimethylbutadiene. N. Ya. Dem'yanov and A. A. Ivanov. *Compt. rend. acad. sci.* (U. R. S. S.) [N. S.], I, 318-23(in German 323-4)(1934).—When N_2O_3 was passed into propadiene, $CH_2:C:CH_2$, in cold Et_2O, a cryst. nitrosite, $C_3H_4N_2O_3$, m. 89° (decompn.), and a very unstable liquid were obtained. The colorless nitrosite gave a blue soln. in hot AcOH, from which it was obtained unchanged on cooling. It affected polarized light and decompd. on standing. The liquid was so unstable it even ignited on standing. When reduced with Sn and HCl it gave much NH_3, and an unstable amine. It is being studied. N_2O_3 acted on dimethylbutadiene, $CH_2:CMeCMe:CH_2$, in Et_2O to give a cryst. nitrosite, $C_6H_{10}N_2O_3$, m. 104-5°, and a liquid (I). The nitrosite affected polarized light, acted on $KMnO_4$ in acetone, but not on Br_2 soln., was reduced to an amine with Sn and HCl and gave the reaction for a primary NO_2 group with MeOK. With hot concd. HCl it gave a product that reacted with $PhNHNH_2$. I was reduced by Sn and HCl to a *diamine*, b. 180-200° (mainly 195°). HCl salt, $C_6H_{16}(NH_2HCl)_2$, chloroplatinate, $C_6H_{16}(NH_3Cl)_2PtCl_4$, and di-Bz deriv., m. 241-2°. This diamine affects polarized light and the vapors of its HCl salt gave the pyrrole reaction when it was heated in a test tube. Hence the amine must be $H_2NCH_2CMe:CMeCH_2NH_2$, and I must be $ONCH_2CMe:CMeCH_2NO_2$. John E. Milbery

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

IVANOV, A.A.

10

PROCESSES AND PROPERTIES INDEX

Synthesis of cyclohexane-1,1,4,4-tetracarboxylic acid and cyclohexane-1,4-dicarboxylic acids. V. V. Feofilaktov and A. A. Ivanov. *J. Gen. Chem.* (U. S. S. R.) 5, 1459-61(1935).—Tetra-Et butane-α,β,γ,γ-tetracarboxylate, obtained by the method of Noyes and Karyakides (*C. A.* 4, 2944), on freezing with snow + NaCl mixt. deposited 4-5% (by wt.) tetra-Et cyclohexane-1,1,4,4-tetracarboxylate, m. 75.5-6.5°; this on sapon. gave the free acid, m. 238-40° (foaming). The acid was heated at 240° in a metal bath, the melt was dissolved and filtered. The soln. on cooling pptd. *trans*-hexahydroterephthalic acid, and the filtrate on concn. pptd. the *cis*-isomer.

Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Plasticity as one of the characteristic properties of types of synthetic rubber. A. A. Ivanov. *Caoutchouc and Rubber* (U. S. S. R.) **1938**, No. 6, 25-8.—A crit. discussion of different units for expressing the plasticity of synthetic rubber. The formulas of Williams (*C. A.* **18**, 1703) and Karrer (*C. A.* **23**, 4106 and 4802) are not satisfactory. The author proposes to express H_1 (the height of the sample with the wt.) and H_2 (the height of the sample after the wt. is removed) by extrapolating them each time after different periods of plasticization to the original height of the sample H_0, and then to express the softness in percentage, $H_1 \times 100/H_0$ and the "nerve" of recovery in percentage $H_2 \times 100/H_1$.

A. Pestoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

IVANOV, A.

Ca

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

10

The action of aromatic diazo compounds on compounds of the type of alkylacetoacetic esters as a method for the synthesis of arylhydrazones of α-keto acids and α-amino acids. IX. The reaction of cyclohexanone-2-carboxylic acid ester with diazobenzene. V. V. Feofilaktov and A. Ivanov. *J. Gen. Chem.* (U. S. S. R.) 13, 457-66(1943) (English summary); cf. *C. A.* 38, 1211[9].—A soln. of 0.92 g. Na in 30 cc. EtOH is treated with cooling and stirring with 6.8 g. *Et cyclohexanone-2-carboxylate* (b_{10} 104-6°, n_D^{20} 1.4705, d_4^{20} 1.0740), to yield a paste of the *Na deriv.* which is slowly added to 6 g. NaOAc in 30 cc. water, simultaneously with PhN_2Cl soln. (from 5.2 g. $PhNH_2Cl$), with stirring and cooling; after 4.5 hrs. the oil is sepd., and the Et_2O ext. of the aq. layer is added to the oil; on standing the material crystallizes to a mixt. of the α- and β-forms of *di-Et α-keto-pimelate phenylhydrazone*; the α-form, recrystd. from EtOH, m. 89.5-90°; while the β-form (sepd. mechanically from the mixt.) m. 142-3° (from EtOH). Hydrolysis of the crude hydrazone by alc. KOH yields *α-keto-pimelic acid phenylhydrazone*, m. 143-4° (from 80% AcOH); a small amt. of a *second form* was isolated, m. 131-2° (too small amt. prevented further study). Reduction of the hydrazone by Zn in EtOH in the presence of dry HCl yielded 66.6% *α-aminopimelic acid*, m. 220° (from water). G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

IVANOV, A. N.

10

Action of nitrous anhydride on dimethylbutadiene. A. A. Ivanov (Moscow Acad. Timiryazeva). *Izv. Sibir. Otdeleniya Akad. Nauk SSSR* 16, 61-5(1959). *Dimethylbutadiene* in Et_2O was treated with N_2O_3 with ice cooling. The soln assumed a blue color and deposited snow-white crystals of the adduct. It was established that only 1 mole N_2O_3 can be added to the diene, and a max. yield of 22.18% of the *mono-N_2O_3 adduct*, m. 104.5° (from $EtOAc$), could be isolated. Reduction of this with Sn-HCl gave an amine, which was not isolated but gave a *picrate*, m. 230.4°, and a *chloroplatinate*, m. above 280°, while treatment with KOMe and HCl, with heating, gave, in the 1st instance a nitro compd., $C_6H_9NO_2$, m. 89-90°, thus indicating the loss of NO and formation of an unsatd. nitro deriv., while in the 2nd instance (heating with HCl in sealed tube) there was formed a liquid product which was distillable with steam and which gave a solid deriv. with $PhNHNH_2$, thus the solid N_2O_3 adduct is a *pseudonitrosite* of the compn. $(C_6H_{10}N_2O_3)_x$. After removal of the cryst. adduct, the dark liquid residue was reduced with Sn-HCl to give a no. of basic products: (a) colorless, b. 160-80°, (b) yellow, b. 180-200°, (c) dark, b. over 200°, and (d) deep-red residue. Treatment of the high-boiling product (b. 160-80°) with HCl gave $C_6H_{10}(NH_2)_2 \cdot HCl)_2$ as colorless crystals; *chloroplatinate*, difficultly sol., yellow; *chloroaurate* decomp. 160.5°; *Bz deriv.* m. 241.2° (from $EtOH$). Careful fractionation in vacuo gave $C_6H_{10}(NH_2)_2$, b_{10} 97.8-9°, n_D^{20} 1.4745, d_4^{20} 0.9226, and $C_6H_{10}(OH)NH_2$, b_{10} 92.8°, n_D^{20} 1.4721, d_4^{20} 0.9021. Steam distn. of the liquid N_2O_3 adduct gave a small amt. of a volatile liquid and a dark red oily residue which crystd. on standing over H_2SO_4 and was identified as a *di-NO_2 compd.*, $C_6H_{10}(NO_2)_2$, m. 71.5-2° (from $EtOH$). Reduction with Sn-HCl gave the same diamine as was secured from the pseudonitrosite and from the liquid adduct, while oxidization gave *nitroacetone*, m. 46.5°.

G. M. Kosolapoff

ASTIA METALLURGICAL LITERATURE CLASSIFICATION

IVANOV, A.A.
CA

Apparatus for percolation hydrolysis of wood. A. A. Ivanov. U.S.S.R. 69,875, Dec. 31, 1947. M. H.

S/153/61/004/005/003/005
E142/E485

AUTHORS: Shenbor, M.I., Burmistrov, S.I., Ivanov, A.A.

TITLE: Increasing the yield of acrylonitrile during the thermal dehydration of ethylene cyanhydrin

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy SSSR. Khimiya i khimicheskaya tekhnologiya, v.4, no.5, 1961, 837-842

TEXT: Large quantities of acrylonitrile (AN) can be obtained by the thermal liquid phase dehydration of ethylene cyanhydrin (ECH). The process is carried out at a temperature of 170 to 240°C, in the presence or absence of a catalyst. During this process by-products are formed which decrease the yield of AN and therefore increase production costs. Experiments were carried out on increasing the yield of AN by improving the reaction conditions during the liquid phase dehydration process. The authors evaluated the efficiency of some catalysts mentioned in literature (NaCl and sodium formiate, HCOOK, $(HCOO)_2Ca$, $(HCOO)_2Cu$, $(HCOO)_2Zn$ and $(HCOO)_3Al$), tested new dehydration catalysts and investigated the effect of temperature and of agitating the reaction medium on the yield of the end-product.

Card 1/4

Increasing the yield ... S/153/61/004/005/003/005
E142/E485

The starting material ECH contained 93.2% of the basic material, 0.05% HCN, 1.75% amines and 5% of vat residue. This substance was placed in a 250 ml flask and heated in a wood tube. The authors used a so-called "reinforced" resin which they prepared by dehydrating 14 ml of ECH at 209 to 210°C for 90 min; the addition of this resin accelerated the process considerably. The upper layer of AN was neutralized in a separating funnel with 10% H_2SO_4, to separate ammonia and the amine bases, freed from the acidic aqueous layer and subjected the same to azeotropic distillation. Each distillation stage gave 45% of a fraction boiling between 68 and 75°C (which contained water) and 55% of a fraction with a boiling point between 75 to 88°C, the latter being AN. The first fraction was redistilled and this process was repeated four times. The H_2SO_4 solution (after neutralization of the upper layer) and the water were additionally steam distilled; this insured complete separation of AN. The heat transfer and even distribution of temperature in the reaction medium were improved by mechanical agitation (220 rev/min); this increased the yield of AN by 3%. Investigations on the effect of temperature showed that the process is rather slow at a temperature below 180°C;

Card 2/4

S/153/61/004/005/003/005
E142/E485

Increasing the yield ...

a 57% yield of AN was obtained at 170°C. The yield of the resin reached a minimum on increasing the temperature to 110°C and above that temperature the yield of ECH increased again. The most satisfactory yields and lowest resin formation occur at a temperature between 209 and 210°C. Some of the experiments were carried out whilst using a saturated solution of NaCl and bubbling CO_2 through; a 77% yield was obtained; the yield of AN increased to 80% when using NaCl without CO_2. Further experiments indicated that the catalytic dehydration of ECH in a current of nitrogen did not affect the yield of AN. Sodium formiate was most effective amongst the salts of formic acid (when used as catalyst). Experiments in which mixtures of two catalysts were used indicated that these mixtures had no higher catalytic activity than the individual components themselves. These experimental data were used for calculating parameters of an industrial plant with an annual output of 5000 ton AN and it was found that highly satisfactory results were obtained when carrying out the dehydration process with a sodium formiate catalyst at 210°C. There are 1 table and 12 references: 2 Soviet-bloc and 10 non-Soviet-bloc. The four most recent

Card 3/4

Increasing the yield ... S/153/61/004/005/003/005
E142/E485

references to English language publications read as follows:
Ref.6: US Pat. 2436774 (1948); Chem. Abstrs., 42, 3773 (1949);
Ref.7: US Pat. 2461492 (1949); Chem. Abstrs., 43, 3836 (1949);
Ref.8: US Pat. 269L452 (1954); Chem. Abstrs., 17, 11689 (1955);
Canad.Pat. 511735 (1955); Canad.Pat. 511732 (1955);
Ref.9: US Pat. 2501651 (1950); Chem. Abstrs., 44, 5375 (1950).

ASSOCIATION: Dnepropetrovskiy khimiko-tekhnologicheskiy institut im. F.E.Dzerzhinskogo. Kafedra tekhnologii osnovnogo organicheskogo sinteza i SK (Dnepropetrovsk Institute of Chemical Technology im. F.E.Dzerzhinskiy. Department of Technology of Basic Organic Synthesis and SK)

SUBMITTED: May 23, 1960

Card 4/4

88435

S/079/61/031/001/019/025
B001/B066

15.8114 2209

AUTHORS: Andrianov, K. A., Khananashvili, L. M., Kazakova, A. A., and Ivanov, A. A.

TITLE: Synthesis of Poly(phenoxy-methyl-phosphinoxy) Aluminum Oxanes

PERIODICAL: Zhurnal obshchey khimii, 1961, Vol. 31, No. 1, pp. 228 - 231

TEXT: Following their papers of Refs. 1 and 2, and in view of Ref. 3, the authors now studied the syntheses of some organophosphorus-aluminum compounds and tried to convert them to polymers with a principal chain of aluminum oxanes. The synthesis of these organophosphorus-aluminum compounds was made by esterification of the acid chloride of methyl phosphinic acid with phenol, combined with a reaction of the resultant methylphenoxy phosphinic acid chloride with aluminum-n-butylate, according to the equation:

$$CH_3P(=O)Cl_2 + C_6H_5OH \longrightarrow \underset{(I)}{CH_3P(=O)Cl(OC_6H_5)} \xrightarrow{Al(OC_4H_9)_3} \underset{(II)}{(C_4H_9O)_2Al-O-P(=O)(CH_3)(OC_6H_5)} + C_4H_9Cl. \quad (III)$$

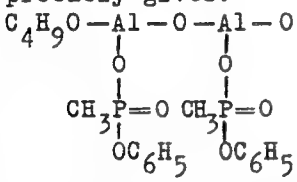
Card 1/3

88485

Synthesis of Poly(phenoxy-methyl-phosphinoxy) Aluminum Oxanes

S/079/61/031/001/019/025
B001/B066

Compound (I), hitherto not yet described, was separated in pure condition by distillation of the reaction products (26.2 %). The low yield is due to the formation of compound $CH_3PO(OC_6H_5)_2$ and, presumably, of a mixture of condensation products of the organophosphorus compounds present. The yield of butyl chloride was 58 %. The reaction carried out at 80 - 90°C yields phenoxymethyl-phosphinoxy-dibutoxy aluminum (II). Elevated temperatures give compounds insoluble in organic solvents. The viscosity of the product of the hydrolysis of compound (II) rapidly increases. This hydrolysis probably gives:



The increase in viscosity depends on the water quantity applied, it is most pronounced at the beginning reaction. The hydrolysis products separated from the solution are solid compounds soluble in butyl alcohol. A study of the thermo-mechanical properties of the hydrolysis products reveals that an increase on the water quantity in the above hydrolysis does not affect the flow temperature of the polymer considerably, but somewhat decreases the interval between the temperatures of vitrification

Card 2/3

88485

Synthesis of Poly(phenoxy-methyl-phosphinoxy) Aluminum Oxanes

S/079/61/031/001/019/025
B001/B066

and of flow. Evaporation of the polymer solution on a solid surface gave brittle films. There are 2 figures and 3 references: 2 Soviet and 1 German.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii (Moscow Institute of Fine Chemical Technology)

SUBMITTED: February 20, 1960

Card 3/3

ROZOVSKIY, A.Ya.; BIRYUKOVICH, M.M.; IVANOV, A.A.; LIBEROV, L.G.; BUTYUGIN, V.K.; KAGAN, Yu.B.; KRYUKOV, Yu.B.; BASHKIROV, A.N.

Mechanism of the carbide-forming reaction of fused iron catalysts for synthesis from CO and H_2. Neftekhimiia 3 no.1:97-103 Ja-F '63. (MIRA 16:2)
(Iron catalysts) (Iron carbides)
(Chemistry, Organic--Synthesis)

ROZOVSKIY, A.Ya.; IVANOV, A.A.; KAGAN, Yu.B.; BASHKIROV, A.N.

- Kinetics of reactions involving the solid phase. Part 2: Hydrogenation of iron carbides. Kin.i kat. 4 no.1:97-108 Ja-F '63. (MIRA 16:3)

1. Institut neftekhimicheskogo sinteza AN SSSR i Institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.
(Iron carbides) (Hydrogenation)

ROZOVSKIY, A.Ya.; BIRYUKOVICH, M.M.; IVANOV, A.A.; KAGAN, Yu.B.; BASHKIROV, A.N.

Kinetics of reactions involving the solid phase. Part 3: Carbide formation in fused iron catalysts induced by carbon monoxide. Kin. i kat. 4 no.3:373-381 My-Je '63. (MIRA 16:7)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Carbides) (Iron catalysts)
(Chemical reaction, Rate of)

ROZOVSKIY, A. Ya.; BIRYUKOVICH, M.N.; IVANOV, A.A.; KAGAN, Yu.B.; BASHKIROV, A.N.

Kinetics and mechanism of the carbidizing treatment of iron catalysts for synthesis from CO and H_2. Neftekhimiia 4 no.2: 269-274 Mr-Ap'64 (MIRA 17:8)

1. Institut neftekhimicheskogo sinteza AN SSSR imeni Topchiyeva.

L 23209-66 EWT(1)/ETC(f)/EPF(n)-2/EWG(m) IJP(c) AT
ACC NR: AP6008079 SOURCE CODE: UR/0020/66/166/005/1084/1087

AUTHOR: Ivanov, A. A.

ORG: none

TITLE: Stabilization of drift instability in traps with a magnetic field which increases toward the boundary

SOURCE: AN SSSR. Doklady, v. 166, no. 5, 1966, 1084-1087

TOPIC TAGS: plasma instability, magnetic trap, plasma physics, plasma magnetic field

ABSTRACT: The author considers drift instability in a plasma trap. While it would be natural to assume that a magnetic field which increases toward the boundary of the plasma should stabilize drift instability since it is not advantageous from an energy standpoint for the particles to pass into the region of intense magnetic fields, it is shown that this type of stabilization does not in fact take place. The case where the electron temperature is much higher than the ion temperature is considered and the simplest geometry is assumed: a rare plasma in the field of an infinitely long straight filament, where the external boundary of the plasma is a dielectric cylinder. Oscillations are considered for which the phase velocity along the magnetic field is much less than the Alfven velocity and the speed of ionic sound. The motion of ions along the field is disregarded. It is found that stability of drift waves is as-

Card 1/2

L 23209-66

ACC NR: AP6008079

sociated only with a special form of the distribution function. The plasma is stable with respect to build-up of oscillations in the drift waves for any gradients in the magnetic field. I am grateful to L. I. Rudakov for formulating the problem and directing the work. Orig. art. has: 14 formulas.

SUB CODE: 20/ SUBM DATE: 03Jun65/ ORIG REF: 006/ OTH REF: 001

Card 2/2 BK

KONOBEYEVSKIY, S. T., ZAYMOVSKIY, A. S., LEVITSKIY, B. M., SUKURSKIY, Y. N.
CHEBOTAREV, N. T., BOBKOV, V. V., YEGOROV, P.P., NIKOLAYEV, G. N. and IVANOV, A. A.

"Some Physical Properties of Uranium, Plutonium and Their Alloys."

paper to be presented at 2nd UN Intl.' Conf. on the peaceful uses of Atomic Energy, Geneva, 1 - 13 Sept 58.

IVANOV, A.A.

Waves in shallow bodies of water. Trudy MGI 1:5-11 '48. (MLRA 7:5)
(Waves)

IVANOV, A.A.

"Photorecording of Wave Elements From Shore to Boat" TR. Mor. Gidrofiz. in-ta AN SSSR, 4, 1954, 15-22

A method of slit photography is suggested. It was already applied by an A.N. Krylov in 1907. The length, velocity of propagation, period and height of waves on shallow waters may be measured. Pitching and rolling of vessels also may be recorded by the instrument. (RZhFiz, No 10, 1955)

IVANOV, A.A.

USSR/Miscellaneous - Hydrophysics

Card 1/1 : Pub. 124 - 8/24

Authors : Ivanov, A. A., Dr. of Phys-Math. Sc.

Title : Theory and calculation of sea wind-waves

Periodical : Vest. AN SSSR 9, 56-58, Sep 1954

Abstract : Investigations were carried out by the Sea Hydrophysics Institute of the Academy of Sciences USSR for the purpose of finding a method of recording all basic elements of sea wind-waves, which would make it possible to obtain a greater number of sufficiently accurate measurements and the relations determining the dimensions of the waves in relation to wave forming factors - wind velocity, continuation of wind effect, wave acceleration and depth of the sea. The results obtained, are briefly analyzed.

Institution : Academy of Sciences, USSR, Sea Hydrophysics Institute

Submitted : ...

FD-2899

USSR/Geophysics - Wind waves

Card 1/2 Pub. 45 - 10/11

Author : Ivanov, A. A.

Title : Discussion. Variability of wind waves of seas and oceans

Periodical : Izv. An SSSR, Ser. geofiz., Nov-Dec 1955, 557-560

Abstract : The author discusses the graphical representation of the law governing the distribution of mass phenomenon, the profile of wind waves according to observations in nature, distribution curves (number of cases versus period) for various values of asymmetry, and two-modal distribution curves. He remarks that certain authors in their investigations of the variability of wind waves (e.g. Ye. M. Selyuk, "Methods of investigating the wave regime of lake-like reservoirs," Trudy Gos. gidrologicheskogo in-ta [Works of the State Hydrological Institute], No 22, 1950; A. P. Morozov, "Investigation of the variability of sea waves," Trudy Gos. okeanograficheskogo in-ta, No 23, 1953) are led, on the basis of an analysis of the results of observations on waves and swells, to the conclusion concerning the possibility of considering the values of the observed elements of waves as random quantities and therefore recommend the application

Card 2/2

FD-2899

Abstract : of the methods of mathematical statistics. The present writer disagrees against this recommendation as detracting investigators from the essence of the phenomenon. Four references.

Institution :

Submitted :

IVANOV, A.A.

Precalculation of wind wave elements. Trudy MGI 5:59-65 '55.
(MLRA 9:5)

(Waves)

IVANOV, A.A.

Characteristics of wind waves generated in shallow water. Trudy MGI 5:66-70 '55. (MLRA 9:5)

(Waves)

IVANOV, A.A., doktor fiziko-matematicheskikh nauk.

"Wind, sea, and swell; theory of relations for forecasting." H. Sverdrup, W. Munk. Reviewed by A.A. Ivanov. Izv.AN SSSR. Ser.geofiz. no.1: 117-118 Ja '56. (MLRA 9:3)
(Wave motion, Theory of)

SOV/124-57-5-5586

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 5, p 69 (USSR)

AUTHOR: Ivanov, A. A.

TITLE: Some Deductions Drawn From the Analysis of Certain Observations on Wind-created Waves (Nekotoryye vyvody iz analiza dannykh nablyudeniy nad vetrovym volneniyem)

PERIODICAL: Tr. Mor. gidrofiz. in-ta AN SSSR, 1956, Vol 8, pp 44-62

ABSTRACT: The problem of the application of Pearson's distribution curves to the study of ocean waves generated by wind is investigated. The author proposes to alter the design of the wave recorder so that in addition to the profile of the wave the rate of wave propagation be recorded also. Numerous observations of waves were conducted by the author by means of a photographic wave recorder which recorded the period, the length, the height, and the velocity of the waves passing successively past a fixed frame. The coefficients of variance and skewness were calculated for the distribution curves of the wave elements. Curves for the period and the height distribution are given as well as the curves for the velocities and periods of the waves in a shallow basin and other recorded material. On the basis of the

Card 1/2

SOV/124-57-5-5586

Some Deductions Drawn From the Analysis of Certain Observations on (cont.)

analysis of the observational data the author comes to the conclusion that along the front of the wave the variation in height is greater than that of any other wave element.

P. S. Lineykin

Card 2/2

30-58-4-17/44

AUTHORS: Grabovskiy, V. I., Professor; Kolesnikov, A. G., Professor; Ivanov, A. A., Doctor of Physical and Mathematical Sciences

TITLE: Research Done During the Expedition of the "Mikhail Lomonosov" (Ekspeditsionnyye issledovaniya na sudne "Mikhail Lomonosov") Studies of Hydrophysics in the Atlantic (Gidrofizicheskiye raboty v Atlanticheskom okeane)

PERIODICAL: Vestnik Akademii Nauk SSSR, 1958, Nr 4, pp.86-90 (USSR)

ABSTRACT: The present investigations of oceans and seas show that their most essential processes are dependent on the thermal and dynamic interaction of the ocean and the atmosphere. Therefore the main interest is directed to the investigation of the heat exchange processes between atmosphere and ocean, to the distribution of heat in quantities of water as well as to the formation of streams and waves. Then the authors report in detail on the future research within the frame of the program of the International Geophysical Year. According to a decision of the Committee for the execution of the works of the MGG the investigations in the North Atlantic are to be carried out by the scientific research ships "Mikhail Lomonosov"

Card 1/3

30-58-4-17/44

Research Done During the Expedition of the "Mikhail Lomonosov". Hydrophysics in the Atlantic

(Figure 1), "Ekvator" and "Sevastopol". The "Mikhail Lomonosov" was built in the "Neptun" ship yards in Rostok (DDR), it has a displacement of 6000 t and can also be used for works in ice. Its deck was made longer and a landing place for helicopters was incorporated. The ship has special devices and equipment, among others a deep-sea hoist for anchoring down to 15000 m, 8 hydrologic hoists of the "Okean"-type down to 4000 m, 3 echosonic fathometer automatic recorders down to 12000 m, 1 echosonic fathometer of the "Lodar"-type for vertical and horizontal probing. Then a workshop for experiments and 16 laboratory rooms are installed aboard the ship. The average speed of the ship is 13 knots and it has an operating range of about 11000 miles. The maiden voyage was made for testing the equipment of the ship (Figure 2). But also a number of works of general kind were carried out. Also a group of German scientists under the direction of Doctor E. Bruns took part in this expedition. The second voyage is shown in Figure 3 and is supposed to include the collaboration of all three ships. The main oceanographic work of this voyage will be carried out according to the plan by the MGG, which is further detailed. The "Mikhail Lomonosov" started on this voyage which will last 4 months

Card 2/3

30-58-4-17/44

Research Done During the Expedition on the "Mikhail Lomonosov" Hydrophysics in the Atlantic

on February 23, 1958. There are 3 figures.

1. Oceanography—Atlantic Ocean 2. Oceanography—Instrumentation

Card 3/3

IVANOV, A.A.

Waves in the Sea of Azov and Tsimlyansk Reservoir. Trudy MGI 15:91-96 '59. (MIRA 12:6)
(Azov, Sea of--Waves)
(Tsimlyansk Reservoir--Waves)

IVANOV, A.A.

Marine Hydrophysiological Institute of the Academy of Sciences of the U.S.S.R. Biul. Okean. kom. no.5:26-29 '60. (MIRA 13:10)
(Oceanographic research)

IVANOV, A.A.

First cruise of the expeditionary ship "Mikhail Lomonosov."
Biul. Okean. kom. no.5:30-34 '60. (MIRA 13:10)
(Atlantic Ocean--Oceanographic research)

IVANOV, A.A.

Brief report on the work of the expeditionary ship "Mikhail Lomonosov" during her second cruise. Biul. Okean. kom. no. 5:35-39 '60. (MIRA 13:10)

(Atlantic Ocean--Oceanographic research)

IVANOV, A.A.; SAMARIN, V.G.

Formulas for determining wave elements in synchronous surveying from the ship with two A.A. Ivanov's slot type photographic wave recorders set up on a vertical. Trudy MGI 20:116-121 '60.
(MIRA 13:10)

(Waves) (Hydrographic surveying)

S/614/61/000/008/001/004
D037/D113

AUTHOR: Ivanov, A.A.

TITLE: The fifth voyage of the "Mikhail Lomonosov" expeditionary ship

SOURCE: Moscow. Akademiya nauk SSSR. Okeanograficheskaya komissiya. Byulleten', no. 8, 1961, 12-16

TEXT: The author reports on the fifth voyage of the "Mikhail Lomonosov" expeditionary ship, carried out from April 14, to July 7, 1959, to study physical, biological, and oceanographical processes in two parts of the Atlantic Ocean (Fig. 1). Seventy scientists and scientific and technical associates. 4 geophysicists from the SZG and 1 Polish expert took part in the expedition. The results obtained by 63 deep-water stations, 193 bathythermographic observations, surveying with phase meters and echo sounders and by dropping 120 radiosondes permitted studying the basic features of the distribution of physical, hydrological, aerometerological and biological features in the investigated sections. During the entire voyage, the radiation balance and its components were recorded. Fig. 2 shows the change in these components along the meridian of longitude 30°W. in April-May 1959. Based on an analy-

Card 1/4

S/614/61/000/008/00.
D057/D113

The fifth voyage of ...

sis of the qualitative composition of plankton, found with the aid of radioactive C_{14} in a layer stretching from a depth of 500 m up to the surface, three different zones can be distinguished: (1) the mixed water zone of the Irminger current; (2) the zone of the North-Atlantic current; and (3) the zone of tropical and subtropical fauna. The maximum quantity of plankton was found in the subarctic convergence region and near the Azores. Microbiological investigations have shown that the quantity of heterotrophic bacteria increases gradually from north to south, reaching its maximum in the equatorial zone. The greatest morphological diversity in colonies of microorganisms was observed in the waters of the northern and moderate latitudes. New features of a bottom contour, not yet marked in maps, were revealed along the whole sailing route in the North Atlantic Ridge area between the Flores and Fayal Islands and between the stations 368 and 369 (Fig. 1). In some cases, radioactive contamination of the water at depths of 200 - 300 m was discovered. There are 2 figures.

Card 2/4

S/614/61/000/008/001/004
D037/D113

The fifth voyage of ...

Fig. 1. Route of the "Mikhail Lomonosov" expeditionary ship.

Card 3/4

IVANOV, A.A.

Relationship between the amplitude of seismic oscillations and the size of the charge used. Zap. LGI 39 no.2:20-24 '61.
(MIRA 15:2)

(Seismic prospecting) (Blasting)

IVANOV, A.A.

Controlling the relative intensity of reflected waves. Geofiz. razved. no.7:33-37 '62. (MIRA 15:7)
(Seismic waves)

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ACCESSION NR: AT4002124 S/2702/63/000/014/0017/0024

AUTHOR: Ivanov, M. A.

TITLE: [illegible] characteristic of reflected waves in correlation

SOURCE: [illegible] Vsesoyuznoye geologicheskoye okhrany* nedr. Geofizicheskaya

TOPIC TAGS: [illegible] seismology, seismic model, dynamic wave, wave characteristics-
[illegible] correlation, bad parameter [illegible]

[illegible] characteristics [illegible]

[illegible] reflected waves are determined by
[illegible]
[illegible] and to develop criteria for certain-
[illegible]

in correlation. To this end, the reflection coefficient or some other parameters associated with it are determined by the seismograph. The author considers a seis- [illegible] stratification and compares the amplitude of reflected [illegible]

[illegible] the amplitude of the reflected [illegible]

[illegible] stratum [illegible] is the product of the [illegible] is the geometrical divergence; [illegible] corresponding to the level [illegible] and [illegible]

IVANOV, A., inzhener-polkovnik, dotsent, kand. tekhn. nauk

Effect of nuclear radiation. Tekh. i vooruzh. no.2:30-32 F '64.
(MIRA 17:9)

IVANOV, Anatoliy Aleksandrovich; KASPERSKAYA, Ye., vedushchiy redaktor; GOLOVCHENKO, G., tekhnicheskiy redaktor

[Electric equipment in food interprises] Elektrooborudovanie pishchevykh predpriiatii. Kiev, Gos. izd-vo tekhn. lit-ry USSR, 1956. 332 p. (MIRA 10:2)

(Electric apparatus and appliances)
(Food industry)